6 FACILITY TYPES

This plan recommends a mixture of off-street trails, on- and off-street bike facilities and University bike paths to foster a cohesive active transportation network that links all UPD parks and facilities in the City of Urbana. Facility types are organized in Figure 16.

6.1 OFF-STREET FACILITIES

Trails and dedicated paths are available to pedestrians and/ or bicyclists, which offer significant separation from other vehicle traffic.

The following path types are for shared-use between bicyclists and other non-vehicle modes:

- Shared-Use Path (Off-street)
- Shared-Use Path (Sidepath)
- Fitness Trail
- Rail-to-Trail
- Rail-with-Trail

The following path types are for the exclusive use of pedestrians:

- Nature Trail
- Walking Trail

The following path types are for the exclusive use of bicyclists:

• University Bike Path

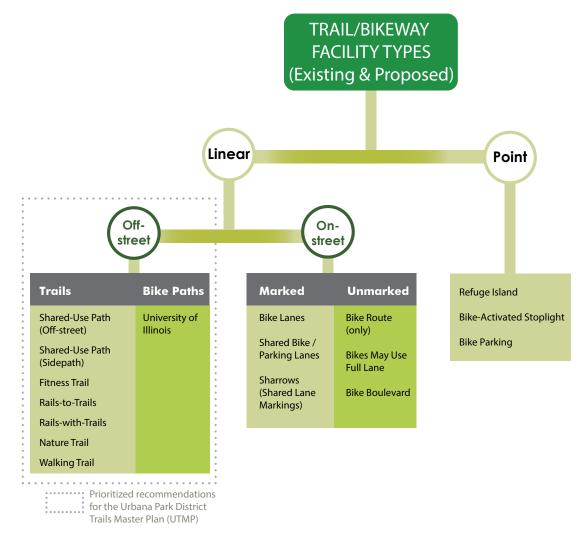


Figure 16 Recommended trail and bike facility types

6.1.1 SHARED-USE TRAILS

The ideal width for all shared-use paths is 10', with a minimum recommended width of 8', in order to facilitate bi-directional and multi-modal traffic. Striping is not necessary on shared-use paths.

See Appendix C for information on signage installation along shared-use trails.

Shared-Use Path (Off-street)

A shared-use trail is a recreational pathway that pedestrians, bicyclists, rollerbladers, people with baby strollers, and skateboarders may use. They may connect parks, employment centers, shopping centers, and public places.

Shared-Use Path (Sidepath)

Sidepaths are shared-use paths running immediately parallel to a roadway, similar to, but wider than a sidewalk. In general, sidepaths may be better choices than on-road bikeways for faster, busier roads with few access points and with well-designed intersections.

Fitness Trail

A fitness trail is an outdoor path with physical obstacles and challenge stations with corresponding signs, spaced along a walking / jogging or running path. Fitness trails should be accessible to people of all physical abilities in order to fully realize their potential to promote good health.

Rail-to-Trail

A "rail-to-trail" is a shared-use path, either paved or unpaved, built within the right-of-way of a former railroad, perhaps under federal railbanking law.

Rail-with-Trail

A "rail-with-trail" is a shared-use path that parallels active railtrack, sometimes as an easement on railroad right-of-way. The Federal Highway Administration's Rails with Trails: Lessons Learned provides best practices information on rails-with-trails.













⁴ Guide for the Development of Bicycle Facilities. 2012. Page 1-3. American Association of State Highway and Transportation Officials (AASHTO).

⁵ Rails with Trails. Harry Sanders. http://home.comcast.net/~phyilla1/sstrails/railswithtrails.html.













6.1.2 PEDESTRIAN TRAILS

These path types are for the exclusive use of pedestrians.

Nature Trail

Nature trails typically run through environmentally sensitive areas. The surfacing and width specifications are more flexible than for shared-use paths; for example, nature trails may have a soft, permeable surface, such as bark, wood chips, or crushed aggregate in lieu of asphalt. Therefore, nature trails are not designed to be ADA accessible. The width of the nature trail may be as narrow as 18 inches to allow for passage through densely vegetated areas and hilly terrain.

Walking Trail

Walking trails are paths similar to sidewalks in parks. These trails are 5-8' wide, and are therefore not appropriate for shared-use with bicyclists. This trail type is appropriate for predominately pedestrian traffic in smaller parks.





6.1.3 BICYCLIST TRAILS

This path type is for the exclusive use of bicyclists.

University Bike Path

A University bike path is an off-street path for exclusive bicycle use on the University of Illinois campus. It has a striped dashed centerline to indicate bi-directional travel.



1 2 3 4 5 6 7 8 9 FACILITY TYPES

6.2 ON-STREET FACILITIES

On-road bicycle facilities are becoming more desired by the public, and are being installed in more places around the country. Using the road often improves safety by increasing cyclist visibility, particularly at intersections, where most crashes occur. On-road bikeways are especially appropriate on moderate to lower speed roads with more than a few intersections, driveways, and entrances. They also eliminate conflicts with pedestrians by keeping bikes off of sidewalks, which are not wide enough to handle both modes.

Bike Lanes

An on-road bike lane is a one-way path that carries bicyclists in the same direction as the adjacent motorized travel lane. Bike lanes should be located on the right side of the roadway, between the parking lane (if one exists) and the travel lane. Bicycles traveling in bike lanes have the same rights and responsibilities as motorized vehicles.

Bike Route

Bike routes are specially designated shared roadways that are preferred for bicycle travel for certain recreation or transportation purposes. These "signed shared roadways" may be appropriate where there is not enough room or less of a need for dedicated bike lanes. See Appendix C for information on signage installation along bike routes.

Shared Bike/Parking Lanes

Bike/parking lanes are recommended on streets with low parking occupancy. They are designated with Bike Route signage and a continuous white line to separate the parking lane from travel lanes. Shared bike/parking lanes should be used for each travel direction, with each lane typically 8' wide (including gutter pans).

Shared Lane Markings (sharrows)

Bicycle positioning on the roadway is key to avoiding crashes with cars turning at intersections. Shared lane markings, also known as "sharrows," are included in the 2009 version of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). Shared lane markings are used to indicate correct straight-ahead bicycle position at intersections with turn lanes, and at intersections where bike lanes are temporarily discontinued due to turn lanes or other factors.

Bikes May Use Full Lane

A Bicycles May Use Full Lane sign may be used to inform road users that bicyclists may occupy the full travel lane. This sign may be used on roadways where no bike lanes or adjacent shoulders usable by bicyclists are present, and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.

Bike Boulevard

A bike boulevard is a local street or series of contiguous street segments that have been modified to function as a through street for bicyclists, while discouraging through automobile travel. Local access is maintained.⁴ Signs and pavement markings create the basic elements of a bike boulevard.



















6.3 POINT FACILITY TYPES

Refuge Island

A refuge island is a concrete island in the middle of a roadway that allows bicyclists and pedestrians to cross one direction of traffic at a time. The benefit of a refuge island is that it allows bicyclists and pedestrians to cross one direction of traffic at a time on roads where cross-traffic does not stop.

Typically, refuge islands include marked crossings on either side of the island, and are oriented at an angle so that the person(s) crossing must look at the approaching traffic before crossing. The minimum width of a refuge island should not be less than 6 feet, according to the Federal Highway Administration Report No. FHWA-SA-05-12.

Bike-Activated Stoplight

A bike-activated stoplight is a pavement marking indicating the detector trigger point for actuation of a traffic signal.

The City of Urbana and Illinois Department of Transportation are responsible for installing and maintaining bike-activated stoplights near and between Urbana Park District parks. For more information on this treatment and its application, please see the Urbana Bicycle Master Plan and/ or Manual on Uniform Traffic Control Devices (MUTCD).

Bike Parking

Bike parking is an end-of-trip facility to secure a bicycle, falling into one of two categories: short-term (two hours or less), or long-term (more than two hours). Short-term bike parking accommodates convenience and ease of use, while long-term parking provides security and weather protection.6

Bike parking should be located at trailheads and destinations along trails and bikeways. A good bicycle rack provides support for the bike frame and allows both the frame and wheels to be secured with one lock. The Association of Pedestrian and Bicycle Professionals (APBP) recommends the "inverted-U" and "post and loop" bike parking types. See Appendix C for information on bike parking installation.







Bicycle Parking Guidelines. 2012. Association of Pedestrian and Bicycle Professionals (APBP).